

# M2.03 – Sustainable Heritage in Landa Park Miniature Golf

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**Sponsor: New Braunfels Parks and Recreation, direct contact is Ylda Capriccioso.**

## Project Description

### Business / Customer Needs

- Add a design to a featureless hole at Landa Park's Mini Golf Course.
- Reflect culture and heritage of New Braunfels.
- Require little to no maintenance for the next 25 years.
- Ensure safety for all ages.
- Have a hole-in-one opportunity.

### Hole 17/Layout

- Ordinary straight hole with a slight incline.
- Hole widens at the start of the incline



- House and Snake will be painted with spray-paint and painted details.
- Will have 10-12 flower domes.

## Final Design / Process

### Metal Pre-Cut



### House Pre-Paint



### Final Lindheimer Home



- Colors selected to best match colors on the real house
- Details added to make the house more identifiable

### Lindheimer Home

- Replica of his home, the user has an option to go through or around.
- Steel walls, cut using plasma cutter, welded together.
- Installed using tabs on sides and screws in ground.
- Designed to prevent golf balls from being trapped inside the house.
- Designed to have low maintenance.
- Provides iconic historical reference.

### Flower Garden Resins/installation

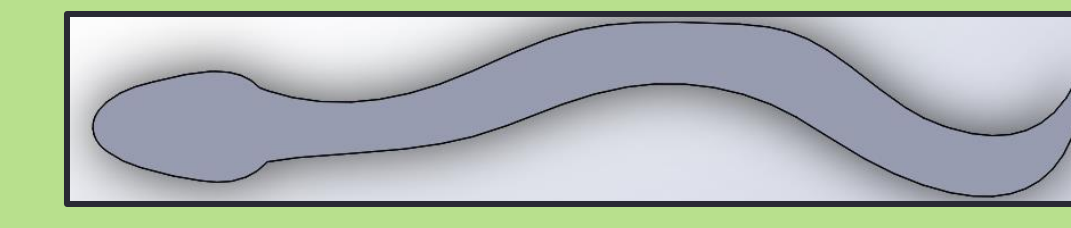
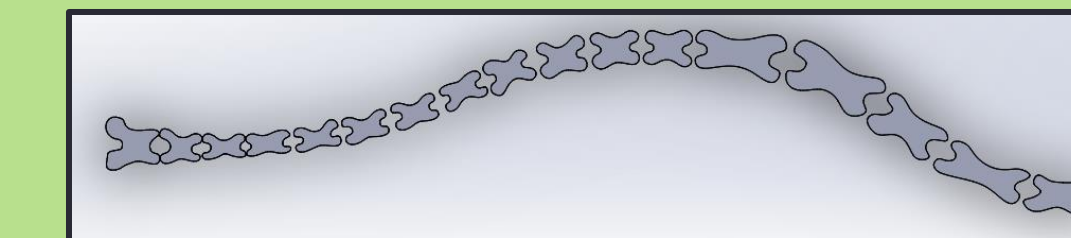
- Flowers discovered by Lindheimer.
- Dried and faux flowers encapsulated in UV resistant resin.
- Encapsulated concrete expansion studs for installation using 3D printed Jigs.
- Morning Glory, Mimosa, and Pink Guara.



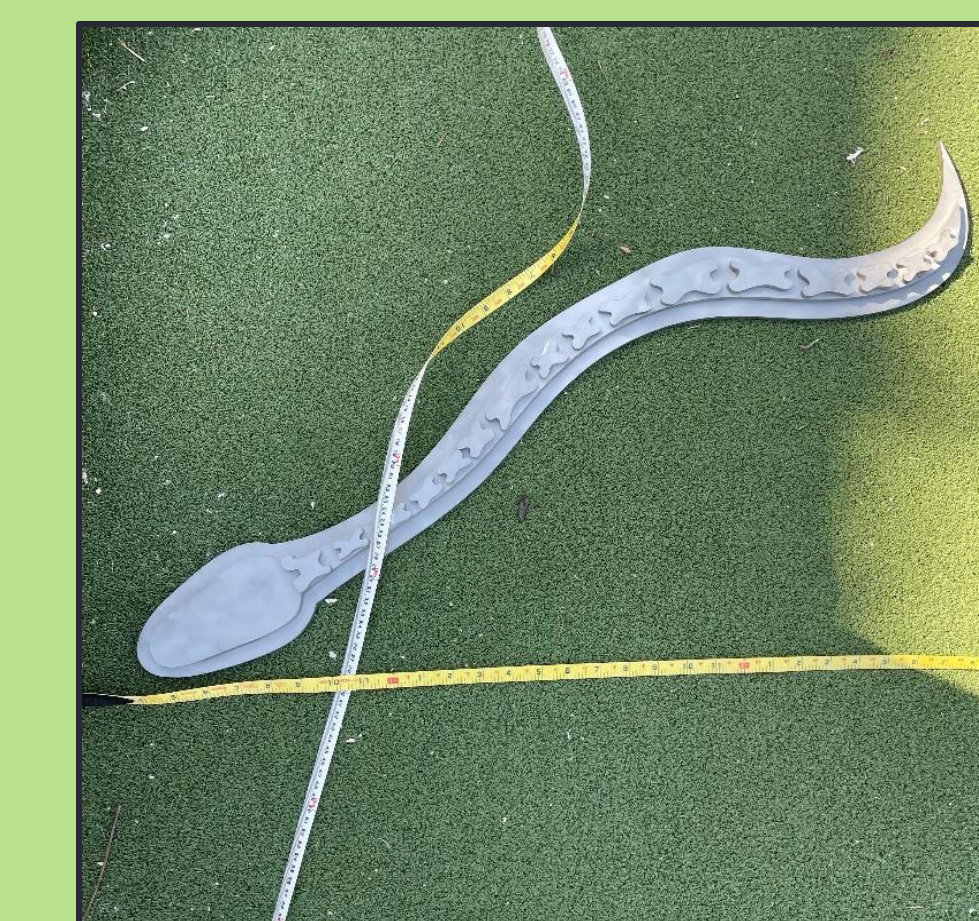
### Elaphe Obsoleta Lindheimeri

- Discovered the Texas rat snake and named after him
- Plasma Cut layered snake.
- Layers welded together.
- Holes drilled for installation.

### CAD Model for Snake Layers



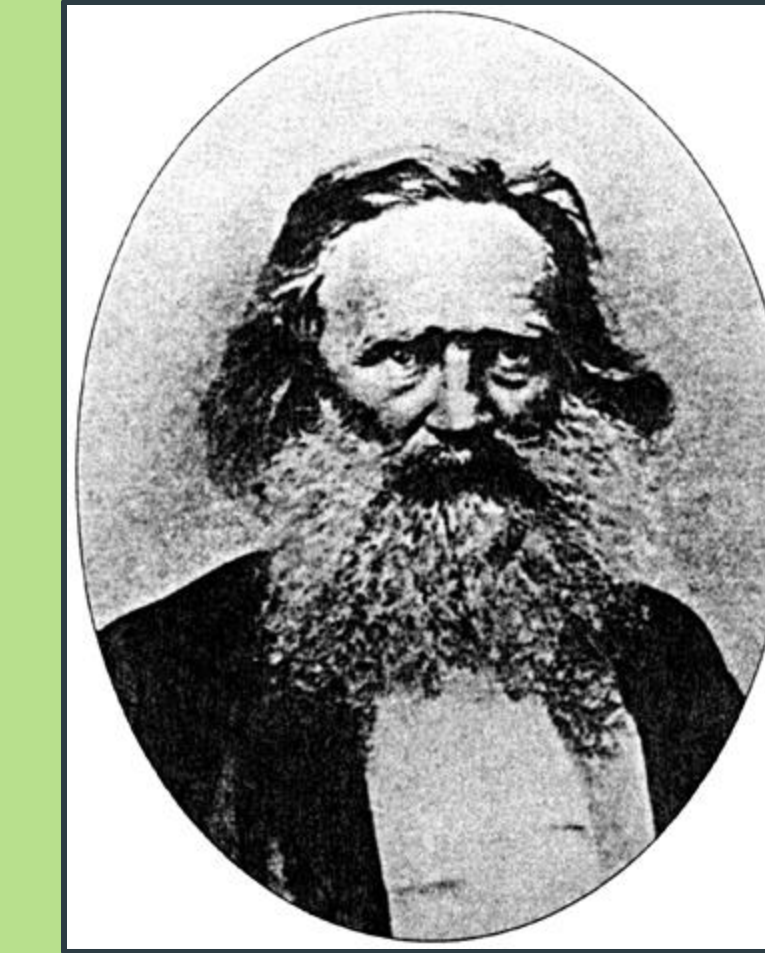
### Rat Snake Pre-Paint



### Painted Rat Snake



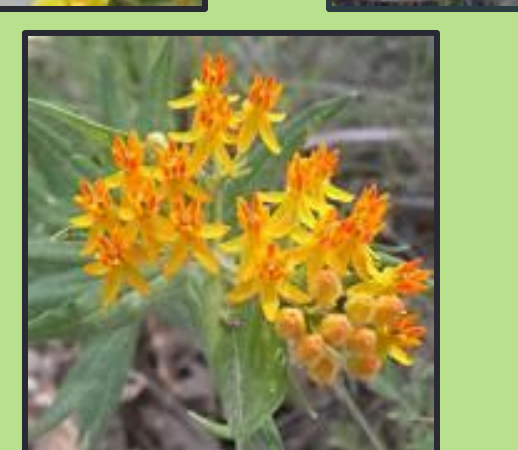
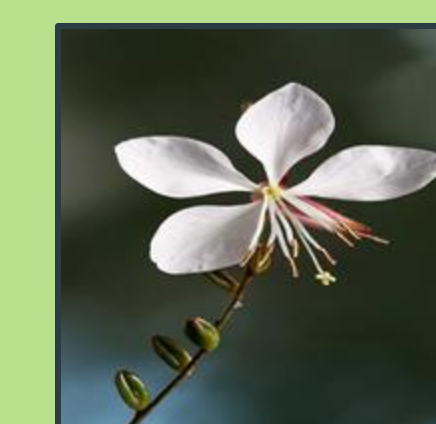
## Historical Significance



### Who was Ferdinand Lindheimer?

- Known as the father of Texas Botany.
- Gathered over 1200 species of plants in Texas.
- Prickly Pear, White Guava, and Texas Rat Snake.
- Aided in importing Italian black bees to pollinate the area.
- Edited and printed the German newspaper, the Neu Braunfelser Zeitung.
- Original home still stands in New Braunfels.

### Contributions to Botany



- Examples of specimen he discovered and collected.
- Flowers are an example of some used in garden.